AVOX Systems

6350 Series
Cylinder and Valve Assembly

WARNING

IMPROPER USE OR IMPROPER MAINTENANCE OF THIS EQUIPMENT MAY RESULT IN SERIOUS INJURY OR DEATH.

THIS EQUIPMENT IS INTENDED TO BE USED ONLY FOR AVIATION APPLICATIONS AND IS TO BE USED ONLY BY, OR UNDER THE SUPERVISION OF, A PILOT OR CREW MEMBER TRAINED AND QUALIFIED IN ITS USE.

THIS EQUIPMENT IS TO BE SERVICED ONLY IN ACCORDANCE WITH THE APPLICABLE COMPONENT MAINTENANCE MANUAL AVAILABLE FROM AVOX SYSTEMS AND ONLY BY SERVICE TECHNICIANS TRAINED IN THE INHERENT HAZARDS OF HIGH PRESSURE AVIATION OXYGEN AND KNOWLEDGEABLE IN THIS EQUIPMENT. THE NAMES OF AUTHORIZED SERVICE CENTERS ARE AVAILABLE FROM AVOX SYSTEMS OR YOUR AUTHORIZED AVOX SYSTEMS DISTRIBUTOR.

THIS EQUIPMENT IS TO BE USED ONLY WITH AVIATOR'S BREATHING OXYGEN MEETING THE REQUIREMENTS OF MIL-PRF-27210.

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AS9100

6350 Series
Cylinder and Valve Assembly

The AVOX Systems 6350 Series provides safety and high performance while requiring minimal maintenance. It features a slow opening valve that needs only fingertip operation.

This cylinder and valve assembly conforms to all DOT regulations and is available with several special options for easy operation.

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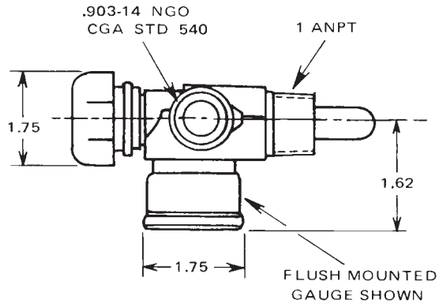
The main feature of the AVOX Systems 6350 Series is the slow opening forged brass valve. This slow opening feature protects the entire system against pressure surges and minimizes the possibility of charging compression effects. Designed with a tapered conical head and matching KEL-F81 seat, this valve allows safe gas flow rates until it is fully opened at 4 1/2 turns. The seat is enclosed in metal to protect maximum surface from exposure to high pressure oxygen.

Other aspects of the assembly include fingertip torque operation, a drain tube that prevents moisture and foreign matter from entering the valve from the cylinder and an over-pressure safety device. If over-pressurized, a shear type safety disc ruptures and allows the oxygen to escape into an overboard dump line. The ruptured disc is retained, preventing plugged lines.

A contents gauge, calibrated 0 to 2000 psi, shows cylinder pressure and is flush-mounted directly to the valve body forging, reducing protrusion and the possibility of damage.

The Basic Valve Assembly

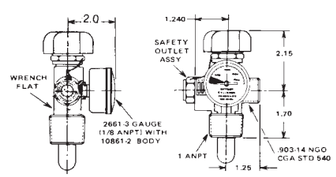
This basic valve assembly can be ordered separately by using the 10850 or 810850 basic part number. The building block below will provide the valve assembly part number in either case.



Basic Unit Part Number 10850 or 810850 – ☐ ☐

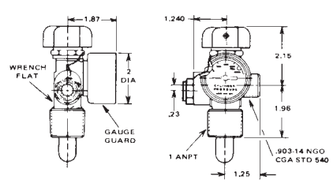
10850 Series

-1 21217 flush-mounted gauge, 10861-01 body assembly (1.45 lb.)
-2 2661-3 gauge (1/8" ANPT) and 10861-02 body assembly (1.35 lb.)
-3 No gauge, 10861-03 body assembly (1.15 lb.)
-5 No gauge, 10861-05 body assembly
-6 No gauge, 10861-06 body assembly



810850 Series

-1 P/N 800887-00 body assembly (1.61 lb.) with P/N 21217 flush-mounted gauge and gauge guard



1 .315 — NO OVERBOARD PROVISION P/N 2814

2 .380 — AND 10050-5 PORT P/N 10689

5 PROTECTIVE SHIPPING PLUG — NO PROVISION FOR PIPING OVERBOARD

6 .505 — 1/8 ANPT PORT P/N 10722

7 .843 — MS 33656-4 OUTLET P/N 22606-1

8 .843 — MS 33656-4 OUTLET P/N 22608-1

9 .853 — MS 33656-5 OUTLET P/N 22608-2

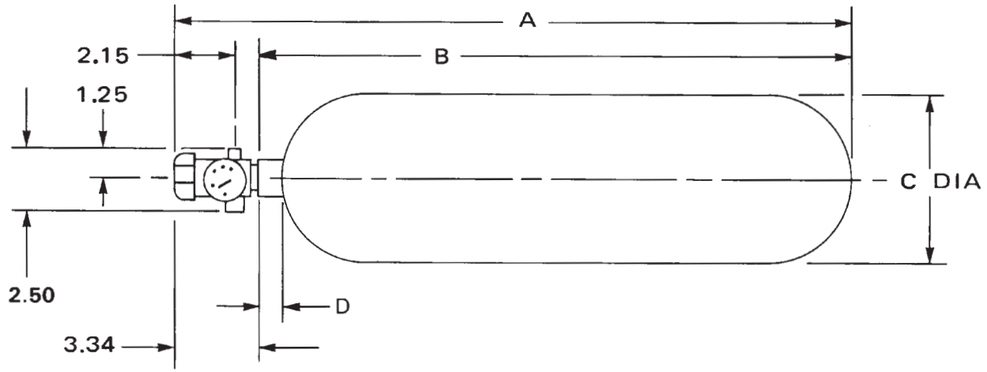
0 1.390 — 5/8 -20 THREAD; MATES WITH W. KIDDE NUT NO. 25976 OUTLET P/N 800843-00

A 1.170 — MS 33656-4 OUTLET P/N 800844-00

B 1.170 — MS 33656-5 OUTLET P/N 800844-01

The Basic Cylinder and Valve Assembly

Both the DOT 3AA and 3HT cylinders with this valve assembly conform to all DOT regulations. They also have 1" ANPT threads, except for the 11 cubic foot size, which has 1/2" ANPT threads. All valves are ported with .903-14 CGA STD. No. 540 outlets.



To order the complete 6350 Series Cylinder and Valve Assembly, use the building block below.

Basic Unit Part Number 6350 – ☐ – ☐ – ☐

	Cyl.	Cyl. P/N	Capacity		Weight (lb.)		Dimensions (in.)				DOT Rating	Valve		Color
			Cu. Ft.	Liter	Empty Ref.	Charged With O_2	A	B	C	D		Code	P/N	
Standard Weight	A2	6084-6	38.4	1086	16.47	20.95	22.59	19.00†	6.68†	.625†	3AA-1800	BB	810850-1B	B Wakefield Green Marked with AVOX and 1800 psi (3AA-1800)
	A4	6084-4	22.0	623	10.90	12.90	21.84	18.25†	5.19†	.625†	3AA-1800	CC	10850-12	
	A5	6084-7	48.3	1367	23.37	27.37	26.84	23.25†	6.68†	.625†	3AA-1800	DD	810850-10	
												EE	810850-1A	
												FF	10850-11	
Light Weight	A22	6084-26	39.4	1115	13.00	16.27	22.72	18.88†	6.63†	.625†	3HT-1850	SSS	10850-17	C Wakefield Green Marked with AVOX and 1850 psi (3HT-1850)
	A25	6084-27	49.8	1409	15.25	19.39	26.72	23.25†	6.63†	.625†	3HT-1850	UU	10850-16	
	A27	6084-29	66.0	1868	20.25	26.23	29.90	26.44†	7.13†	.625†	3HT-1850	UUU	10850-67	
	A33	6084-33	76.5	2165	22.45	28.75	33.09	29.50†	7.13†	.625†	3HT-1850	WW	10850-18	
	A34	6084-34	115.0	3255	34.00	43.55	32.90	29.31†	8.88†	.625†	3HT-1850	X	NO VALVE	
												YYY	10850-19	

NOTE: DOT 3AA type cylinders may be overcharged by 10% if certain DOT requirements are met.
† Minimum Dimension